

IN THE CLAIMS:

None of the claims have been amended herein. All of the pending claims 1 through 20 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as previously amended.

Listing of Claims:

1. (Previously presented) A wire bonding apparatus for bonding a wire to a bond pad located on a semiconductor chip and a lead finger of a lead frame of a plurality of lead frames being supplied to the wire bonding apparatus in a strip form, the apparatus comprising: a wire bonding apparatus having a portion thereof for dispensing the wire to be bonded to the bond pad and the lead finger and bonding the wire to the bond pad or the lead finger; an independent clamp for engaging a portion of the lead finger before bonding of the wire thereto, the independent clamp being independently movable in relation to movement of another portion of the wire bonding apparatus and the lead finger of the lead frame for engaging a portion of the lead finger; and a conventional fixed clamp for engaging another portion of the lead finger adjacent the independent clamp.

2. (Previously presented) The apparatus of claim 1, wherein the independent clamp is located between the wire bonding apparatus and the conventional fixed clamp for engaging the portion of the lead finger during bonding of the wire thereto.

3. (Previously presented) The apparatus of claim 1, wherein the independent clamp includes having an ability to move independently in an x-axis direction, y-axis direction and z-axis direction.

4. (Previously presented) The apparatus of claim 1, wherein the independent clamp is movable independently in any direction of a movement of the wire bonding apparatus.

5. (Previously presented) The apparatus of claim 1, wherein the apparatus further comprises:

heating apparatus located beneath the semiconductor chip.

6. (Previously presented) The apparatus of claim 1, wherein the apparatus further comprises:

heating apparatus located beneath the lead finger.

7. (Previously presented) The apparatus of claim 6, wherein the semiconductor chip is heated before the wire is bonded thereto.

8. (Previously presented) The apparatus of claim 1, wherein the independent clamp is resiliently mounted.

9. (Previously presented) The apparatus of claim 8, wherein the independent clamp is resiliently mounted through use of a spring engaging a portion of the independent clamp.

10. (Previously presented) The apparatus of claim 1, wherein the independent clamp has an end portion thereof which is insulated.

11. (Previously presented) The apparatus of claim 1, wherein the independent clamp has an end portion thereof which is semicircular in shape.

12. (Previously presented) The apparatus of claim 1, wherein the independent clamp has an end portion thereof which is arcuate in shape.

13. (Previously presented) The apparatus of claim 1, wherein the independent clamp has an end portion thereof which is articulated for movement.

14. (Previously presented) The apparatus of claim 1, wherein the independent clamp is located between the wire bonding apparatus and the conventional fixed clamp engaging the portion of the lead finger during bonding of the wire thereto.

15. (Previously presented) A wire bonding apparatus for bonding a wire to a bond pad located on a semiconductor chip and a lead finger of a lead frame of a plurality of lead frames supplied to the wire bonding apparatus in a strip form, the apparatus comprising: wire bonding apparatus having a portion thereof for dispensing the wire to be bonded to the bond pad and the lead finger and bonding the wire to the bond pad or the lead finger; a conventional fixed clamp for engaging a portion of the lead finger; and an independent clamp for engaging another portion of the lead finger before bonding of the wire thereto, the independent clamp having an ability to move as desired in an x-axis direction, a y-axis direction, and a z-axis direction concurrently regarding a portion of the lead finger and being independently movable in relation to movement of another portion of the wire bonding apparatus.

16. (Previously presented) The apparatus of claim 15, wherein the independent clamp is movable independent of a movement of the wire bonding apparatus.

17. (Previously presented) The apparatus of claim 15, wherein the apparatus further comprises:
heating apparatus located beneath the semiconductor chip.

18. (Previously presented) The apparatus of claim 17, wherein the apparatus further comprises:

heating apparatus located beneath the lead finger.

19. (Previously presented) The apparatus of claim 17, wherein the semiconductor chip is heated before the wire is bonded thereto.

20. (Previously presented) The apparatus of claim 15, wherein the independent clamp is resiliently mounted.